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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,722	09/02/2005	Andrew Robert Davids	SER-102	6962

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EXAMINER

KIM, ALEXANDER D

ART UNIT	PAPER NUMBER
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1656

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
31 DAYS	03/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/526,722

Applicant(s)

DAVIDS ET AL.

Examiner

Alexander D. Kim

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 55-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 55-62 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Application Status

1. By virtue of a preliminary amendment filed on **3/17/2004**, claims 1-54 has been canceled; and claims 55-62 have been added. Thus, claims 55-62 are pending in the instant case.

Restriction

2. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group 1 [Claims 55 (a)-(g)] is drawn to the special technical feature of a composition comprising an amino acid sequence SEQ ID NO: 2.

Groups 2-78 [Claim 55 (a)-(g)] are drawn to a composition comprising an amino acid sequence with even SEQ ID NO: between 4-158, respectively.

Groups 79-157 [Claim 55 (h)-(m)] are drawn to a composition comprising an nucleic acid sequence from a sequence odd numbered SEQ ID NO: between 1-157, respectively.

Groups 158 [Claim 55 (n)] are drawn to a ligand which binds specifically to the GCK subfamily of the STE20 family of protein kinases.

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Groups 159-237 [Claim 55 (o), (w), 56] is drawn to a ligand or antibody binds to a polypeptide of Groups 1-78 and kit comprising said antibody, respectively.

Groups 238-316 [Claim 55(p)] is drawn to a compound that changes the level of expression or activity of a polypeptide of Groups 1-78, respectively.

Groups 317-395 [Claim 55(q), 57] is drawn to a ligand binds to a polypeptide of Groups 1-78, respectively.

Groups 396-474 [Claim 55(r)] is drawn to a pharmaceutical composition comprising a polypeptide of Groups 1-78, respectively.

Groups 475-553 [Claim 55(s)] is drawn to a vaccine composition comprising a polynucleotide of Groups 79-157, respectively.

Groups 554-632 [Claim 55(t)-(v)] is drawn to a kit comprising a polynucleotide of Groups 79-157, respectively.

Groups 633-711 [Claim 55(x)] is drawn to a transgenic or knockout non-human animal by a polynucleotide of SEQ ID NO: even number between 2-158, respectively.

Groups 712-790 (Claims 58-59) are drawn to a method of diagnosing a disease in a patient comprising assessing the level of expression of a gene of SEQ ID NO: even number between 2-158, respectively.

Groups 791-869 (Claims 58-59) are drawn to a method of diagnosing a disease in a patient comprising assessing the level of expression of a polypeptide of odd numbered SEQ ID NO: between 2-158, respectively.

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Groups 869-947 (Claims 60-62) are drawn to a method of using a ligand which binds specifically to the GCK subfamily of the STE20 family of protein kinases

Groups 947-1182 (Claims 60-62) are drawn to a method of using a ligand or antibody binds to a polypeptide of Groups 1-78 and kit comprising said antibody, respectively.

Groups 1183-1261 (Claims 60-62) are drawn to a method of using a compound that changes the level of expression or activity of a polypeptide of Groups 1-78, respectively.

Groups 1262-1340 (Claims 60-62) are drawn to a method of using a pharmaceutical composition comprising a polypeptide of Groups 1-78, respectively.

Groups 1341-1419 (Claims 60-62) are drawn to a method of using a vaccine composition comprising a polynucleotide of Groups 79-157, respectively.

Groups 1420-1498 (Claims 60-62) are drawn to a method of using a transgenic or knockout non-human animal by a polynucleotide of SEQ ID NO: even number between 2-158, respectively.

Groups 1499-1577 (Claims 60-62) are drawn to a method of using a kit comprising a polynucleotide of Groups 79-157, respectively.

Groups 1578-1656 (Claims 60-62) are drawn to a method of using a kit comprising a polynucleotide of Groups 79-157, respectively.

The inventions listed as Groups 2-1656 do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The invention of Group I, the special technical feature, requires as its special technical feature of SEQ ID NO: 2. However this technical feature is not special because it does not constitute an advance over the prior art. As it is written, the special technical feature reads on a polypeptide comprising as few as only 2 amino acids of SEQ ID NO: 2. Nakano et al. (2000, cited in the IDS filed on 2/27/2006) teach an amino acid sequence MAGP (first four amino acids in Figure 1 A) which is same as the first four N-terminous MAGP of SEQ ID NO: 2. Because the special technical features of Groups 1-1656 lack novelty or inventive step, the technical features are not contributions over the prior art.

Notice of Possible Rejoinder

3. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined. In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be

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fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Election

4. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

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Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander D. Kim whose telephone number is (571) 272-5266. The examiner can normally be reached on 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleen Kerr Bragdon can be reached on (571) 272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alexander Kim
March 2, 2007

A handwritten signature in black ink, appearing to read 'Richard Hutson', with a stylized, sweeping flourish extending from the end.

RICHARD HUTSON, PH.D.
PRIMARY EXAMINER